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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/348,165	07/07/1999	AKIRA NAKAGAWA	826.1553/JDH	4844
21171	7590	06/17/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			WONG, ALLEN C	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

09/348,165

Applicant(s)

NAKAGAWA ET AL.

Examiner

Allen Wong

Art Unit

2613

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 17 May 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.

6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 5.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 11-23.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).


10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.

12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_

13. ☐ Other: \_\_\_\_\_.

  
Allen Wong  
Primary Examiner  
Art Unit: 2613

Continuation of 11. does NOT place the application in condition for allowance because: All of the broad limitations of the claims have been addressed in the previous Office Action mailed on 11/18/04.

Regarding lines 15-19 and line 26 on page 10 of applicant's remarks, applicant argues that Lynch does not disclose predicting a motion vector of a target block based on motion vectors on a plurality of blocks adjacent to the target block. The examiner respectfully disagrees. Lynch discloses the predicting means for predicting a motion vector of a target block based on motion vectors of a plurality of blocks adjacent to the target block, as disclosed in fig.17 and col.10, ln.23 to col.11, ln.4, where the "PREDICTION" or the prediction of the motion vector is predictively done, and that fig.14 shows that the target block motion vector was predicted for accurately predicting the image data, especially in the MPEG interframe encoding/decoding environment when obtaining the motion vector between a current frame and a reference frame. Also, Lynch's fig.5 discloses that a frame with the shaded area of interest has, for instance, four blocks that are obtained, utilized for predicting a motion vector. The prediction of an image or a pixel clearly implies the prediction of a motion vector, especially when predicting MPEG video images like P and B frames which do require the predicted motion vectors from reference frames to obtain these frames.

Yagasaki was used for further supporting the teachings of Lynch in that Lynch does not disclose the prediction of a motion vector values of blocks adjacent to the target block of the same frame, but Yagasaki teaches the motion vectors of adjacent blocks to the target block in the same frame are implemented for obtaining a predicted motion vector, as disclosed in col.18, ln.1-13. Further, in Yagasaki's fig.1A, one can observe the frame's target block is in the center and in fig.1B, the motion vector is obtained, where there are more than two blocks used. Besides, the term "plural" is defined as of, relating to, or constituting a word form used to denote more than one". So, two or more is the definition of plural ((c)2000 Zane Publishing, Inc. and Merriam-Webster, Incorporated). Certainly, Yagasaki teaches that its teachings can be modified by one of ordinary skilled in the art (col.22, ln.3-10). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Lynch and Yagasaki, as a whole, for accurately predicting motion vectors so as to efficiently produce clear, high quality images for viewing and saving financial costs (Yagasaki col.3, ln.54-61).

Regarding lines 1-4, the applicant seems to misconstrue Lynch's fig.5 in that the shaded part is used for predicting a motion vector because as any one of ordinary skill would easily understand that the shaded part is used for predicting a motion vector and further, in lines 5-8 of applicant's remarks, applicant concedes that the method of obtaining a predicted motion vector is a prior art technology. The prior art technology does disclose that a predicted motion vector is obtained from nearby blocks or adjacent blocks. Regarding lines 21-23 on page 11 of applicant's remarks, applicant states that Lynch does not disclose non-uniformity. The examiner respectfully disagrees. As previously stated, col.11, ln.18-22 and fig.17, note "MODE" is determined and motion vector calculator 111 determines the prediction accuracy based on non-uniformity of the plural motion vectors. And, Lynch discloses that there are plural, different motion vectors moving in different directions, as disclosed in col.3, ln.18-22, so, Lynch suggests the calculation or determination of the accuracy of the prediction based on degrees of non-uniformity of the motion vectors to properly determine the interframe pictures during prediction. Further, Yagasaki also teaches the need for providing a method for coding/decoding image data with determining accuracy of the prediction of images with various degrees of motion vectors, different motion vectors (ie. non-uniformity of plural motion vectors), as disclosed in col.3, ln.54-61 and col.21, ln.52 to col.22, ln.2. The claims do not specifically disclose anything regarding "correctness (closeness) of vectors in an area adjacent to a given vector". Thus, the teachings of Lynch and Yagasaki meet the broad limitations of the claims.

Regarding last paragraph on page 11 to line 2 on page 12 of applicant's remarks, applicant states that the term "accuracy" is used differently from Yagasaki versus the present invention. The examiner respectfully disagrees. The term accuracy, as used in the claims, can be interpreted as a broad range of degrees or values of conformity of a measure of a true value or standard, which the claims do not specifically delve into, so thus, Lynch and Yagasaki's teachings meet the broadly claimed limitations because they both meet some level or degree of conformity of a measure of a standard when predicting motion vector.

Regarding lines 6-11 on page 12 of applicant's remarks, applicant states that the examiner misinterprets Lynch and the term prediction. The examiner respectfully disagrees. Lynch discloses the predicting means for predicting a motion vector of a target block based on motion vectors of a plurality of blocks adjacent to the target block, as disclosed in fig.17 and col.10, ln.23 to col.11, ln.4, where the "PREDICTION" or the prediction of the motion vector is predictively done, and that fig.14 shows that the target block motion vector was predicted for accurately predicting the image data, especially in the MPEG interframe encoding/decoding environment when obtaining the motion vector between a current frame and a reference frame. Also, Lynch's fig.5 discloses that a frame with the shaded area of interest has, for instance, four blocks that are obtained, utilized for predicting a motion vector. The prediction of an image or a pixel clearly implies the prediction of a motion vector, especially when predicting MPEG video images like P and B frames which do require the predicted motion vectors from reference frames to obtain these frames.

Yagasaki was used for further supporting the teachings of Lynch in that Lynch does not disclose the prediction of a motion vector values of blocks adjacent to the target block of the same frame, but Yagasaki teaches the motion vectors of adjacent blocks to the target block in the same frame are implemented for obtaining a predicted motion vector, as disclosed in col.18, ln.1-13. Further, in Yagasaki's fig.1A, one can observe the frame's target block is in the center and in fig.1B, the motion vector is obtained, where there are more than two blocks used. Besides, the term "plural" is defined as of, relating to, or constituting a word form used to denote more than one". So, two or more is the definition of plural ((c)2000 Zane Publishing, Inc. and Merriam-Webster, Incorporated). Certainly, Yagasaki teaches that its teachings can be modified by one of ordinary skilled in the art (col.22, ln.3-10). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Lynch and Yagasaki, as a whole, for accurately predicting motion vectors so as to efficiently produce clear, high quality images for viewing and saving financial costs (Yagasaki col.3, ln.54-61).

Moreover, the applicant agrees with the examiner that Yagasaki pertains to encoding a given motion vector with a predicted motion vector. The term accuracy, as used in the claims, can be interpreted as a broad range of degrees or values of conformity of a measure of a true value or standard, which the claims do not specifically delve into, so thus, Lynch and Yagasaki's teachings meet the broadly claimed limitations because they both meet some level or degree of conformity of a measure of a standard when predicting motion vector. These arguments are applicable to claims 12-16 and 20-22.

Regarding line 23 on page 12 of applicant's remarks about claims 17-19, applicant states that Lynch's motion compensation does not involve predicting a motion vector. The examiner respectfully disagrees. As one of ordinary skill in the art would recognize, the

motion compensation process is included in the motion detection process for ascertaining the best possible motion vector to represent the motion compensated signal motion vector or predicted motion vector.

Regarding line 30 on page 12 to line 2 on page 13 about claim 23, applicant asserts that the examiner misinterprets Lynch's fig. 17. The examiner respectfully disagrees. It is the applicant that appears to be confused with the interpretation of fig. 17 in that the data BMv, FMv and FMv outputted from AO Mv are the first, second and third motion vector values used for obtaining the first, second and third absolute value of difference, where the values are compared with the threshold in elements 104 and 105 to check the accuracy of the absolute value of differences, in that the motion vector is predicted for predicting the image block to accurately represent the image data being conveyed for display.

In conclusion, it is respectfully submitted that the rejection of claims 11-23 is maintained and claim 5 is still allowable is previously indicated.